NATIONAL CANCER INSTITUTE

NCI Cancer Bulletin

Eliminating the Suffering and Death Due to Cancer

October 11, 2005
Volume 2 | Number 39

In this issue:

A Publication of the
National Cancer Institute
U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
National Institutes of Health
NIH Publication No. 05-5498

http://www.cancer.gov

Vaccine to Prevent Cervical Cancer Is Effective

Researchers announced last week that an experimental vaccine, developed by Merck, was highly effective in preventing infections by two strains of the virus that causes cervical cancer.

Women who received the vaccine during a 2-year study were protected against precancerous lesions caused by two strains of human papillomavirus (HPV).

"The findings are dramatic and clear cut," says Dr. Douglas Lowy of NCI's Center for Cancer Research (CCR), who co-developed the original technology on which the vaccine is based. "In the first year and a half after the vaccinations, there was apparently complete protection against lesions caused by the two strains in the vaccine."

The vaccine, called Gardasil, targets HPV types 16 and 18, which cause about 70 percent of cervical cancers. HPV is transmitted sexually and causes almost all cases of cervical cancer. The disease kills more than 200,000 women each year, including many in developing countries.

Merck plans to submit Gardasil to the FDA for approval by year's end using data from the study, which involved more than 10,000 women. The results were presented at the annual meeting

(continued on page 2)

Director's Update

Guest Update by Dr. John E. Niederhuber

Sustaining the Momentum

As many readers of the *NCI Cancer Bulletin* now know, I was recently named by Department of Health and Human Services Secretary Mike Leavitt to oversee day-to-day operations of the National Cancer Institute (NCI) while Dr. Andrew von Eschenbach serves as interim commissioner of the Food and Drug Administration (FDA).

Dr. John Niederhuber
Deputy Director for Translational and Clinical Sciences

The transition to this position was certainly made much easier by the close working relationship I have had with NCI's leadership and staff over the last 4 years, during which time I served as chair of the National Cancer Advisory Board and also was part of several other NCI committees.

While surprise and adjustment may be the best way to describe the last 2 weeks, the adjustments needed in day-to-day operations have been relatively minor. Much of the credit goes to Dr. von Eschenbach's selection of truly outstanding individuals

(continued on page 2)

(Vaccine continued from page 1)
of the Infectious Diseases Society of America in San Francisco.

"You couldn't ask for better data than these," says Dr. John Schiller of NCI's CCR, who along with Dr. Lowy developed the underlying technology for the vaccine. "If all goes well, we could have a vaccine by the end of next summer."

The vaccine also protected against the two HPV types (6 and 11) that cause 90 percent of genital warts. These strains can lead to false-positives on cervical cancer screening tests, such as Pap tests, and cause unwarranted fears about cancer in some women.

"The vaccine includes the four types because we thought it was important to provide broad coverage against the array of biologically important HPV types," says Dr. Mark Feinberg of Merck's Vaccine Division.

When Gardasil was administered in 3 doses over 6 months, the protection was 100 percent for a period of 1.5 years. The long-term efficacy of the vaccine is still not known, and follow-up studies will be required to answer this question.

The researchers emphasize that women who get the vaccine should still follow guidelines for cervical cancer screening. At least a third of the cervical cancers are caused by strains not targeted by the vaccine.

A Phase III clinical trial is underway in Costa Rica to test an HPV 16/18 vaccine manufactured by GlaxoSmithKline (GSK). The researchers, led by Dr. Allan Hildesheim of NCI's Division of Cancer Epidemiology and Genetics, plan to enroll up to 7,000 women and follow them for at least 4 years.

The vaccines developed by Merck and GSK are based on "virus-like particles," the technology created by Drs. Lowy and Schiller. They discovered that a single HPV protein could form noninfectious, virus-like "shells" and trigger protective antibody responses when given as part of a vaccine.

Because the vaccine is preventive, the most cost-effective time to give it would likely be before women become sexually active. In the United States, recommendations about when to give the vaccine would be made by the Advisory Committee on Immunization Practices at the Centers for Disease Control and Prevention.

If approved, Gardasil would be the second approved cancer prevention vaccine after the hepatitis B vaccine, which protects against some forms of liver cancer. ◆

By Edward R. Winstead

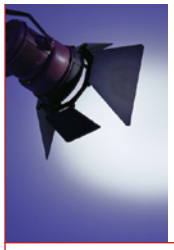
(Director's Update continued from page 1)
to be part of his immediate staff at NCI and to two very special leaders, Drs. Anna Barker and Mark Clanton, who have worked alongside Dr. von Eschenbach for almost his entire tenure at NCI. Working together, we have adapted our roles to ensure that daily operations at NCI have moved along in a nearly seamless fashion. Even more importantly, Drs. Clanton, Barker, and I are committed to maintaining and accelerating progress toward the 2015 goal. The strategic planning to meet this goal was already completed and ours is the task of implementation. Needless to say, I am extremely honored to be part of this outstanding team.

When this change occurred, in my role as deputy director for Translational and Clinical Sciences, I had already been meeting with each of the NCI division and center directors and their teams. Last week I met with the division and center directors as a group. We are truly blessed at NCI with talented, dedicated leaders in these critical positions. They are the real story of NCI and its accomplishments over the years.

During the meeting, we talked about the importance of keeping focused on the outstanding work being performed in our intramural and extramural programs. There was detailed discussion about the tremendous translational and clinical scientific opportunities ahead of us, including the important new initiatives in informatics, nanotechnology, and cancer genomics. We pledged to work together in an integrated fashion to continue the progress we have made toward implementation of NCI's strategic vision.

During the 2 months I have been on the National Institutes of Health (NIH) campus, I find myself once again awed by its immensity. It truly is the scientific marvel of the world. And walking the corridors of the new NIH clinical center reinforced for me how fortunate we are in the United States to have tremendous resources such as this and, with it, exciting opportunities to make a real difference in the lives of those suffering from cancer and other chronic diseases.

For me, these past 2 months have been a palpable renewal of spirit. My step is faster, my enthusiasm and optimism never greater. While the challenges for NCI and FDA are clearly significant, the opportunities have never been better to make a real difference for cancer patients. I hope all of you share in this enthusiasm and have confidence in our leadership. ◆



Spotlight

Rinse and Spit: Saliva as a Cancer Biomarker Source

It's home to more than 700 types of bacteria (by current estimates, at least), can be a source of infection, but also has wound-healing properties. It's essential for swallowing and digestion, but, in many cultures, to expel it at somebody is the ultimate insult. And now this slimy body fluid—saliva—is gaining a reputation in biomedical research circles as an effective source for detecting the hidden presence of disease, including some types of cancer.

Most research into cancer biomarkers has focused on blood components, such as plasma or serum. Saliva, on the other hand, has been largely overlooked as a source of biomarkers. It has long been considered a hostile environment, riddled with bacteria and other detritus that would yield adulterated samples incapable of generating reliable and reproducible results.

But that perception is beginning to change. According to Dr. Sudhir Srivastava, director of NCI's Early Detection Research Network (EDRN), which focuses on identifying and validating novel biomarkers, recent data on saliva-based biomarkers—although preliminary—are promising.

"And, saliva-based technology is desirable," he says, "because it's a noninvasive means of detecting biomarkers."

Head and neck cancers have been the focus of most saliva-based biomarker research. These cancers typically are detected during clinical examinations, but often not until they have already progressed to late-stage disease—a big reason why 5-year survival rates have been mired in the 50 percent range for several decades.

Detecting these cancers at earlier stages, with the aid, for instance, of a saliva-based diagnostic test, could increase 5-year survival to 80 to 90 percent, according to Dr. Elizabeth Franzmann, of the Department of Otolaryngology at the University of Miami. This could help avoid some of the morbidity associated with treatment, including disfigurement and significant swallowing difficulties.

Public attention to saliva-based biomarker research received a significant boost last December with the publication of a pilot study conducted in the lab of Dr. David Wong, of the UCLA Jonsson Comprehensive Cancer Research Center. Elevated levels of seven different RNAs, they reported, could distinguish patients with oral squamous cell carcinoma (OSCC) from controls with 91 percent sensitivity and specificity.

Dr. Wong says that his lab has now performed 4 independent detection trials with 272 subjects and controls.

"These seven markers behave consistently throughout these trials, showing that they are significantly elevated in individuals with oral cancer compared to age- and gender-matched controls," he explains. "It really is quite an amazing observation."

Saliva-based detection methods don't have to be limited to head and neck cancers, Dr. Wong argues. As-yet-unpublished studies by his lab using the same RNA approach to detect early-stage breast cancer, he says, "have been very promising."

Dr. Wong's lab is working with newer testing technologies developed with funding from the National Institute of Dental and Craniofacial Research, which is investing significantly in this area. But other researchers are trying to tease out diagnostic clues from saliva using more conventional assays and are finding success.

Dr. Franzmann led a small study published earlier this year in which she used the conventional ELISA test to detect elevated levels of a soluble form of the protein CD44 (solCD44), which was found to reliably identify patients with head and neck squamous cell carcinoma (HNSCC), regardless of the tumor stage. The closer the cancer to the main oral cavity, the more sensitive the solCD44 levels.

"We've even had cancers where no tumor can be seen in the upper aerodigestive tract, but there is a metastasis to the lymph node," she says. "So that's telling us that it may be capable of picking up disease that we can't even see."

Like Dr. Wong's group, other researchers are also looking at more atypical markers. Dr. Joseph Califano of the Department of Otolaryngology-Head & Neck Surgery at Johns Hopkins Medical Institutions and colleagues recently reported that increased levels of mitochondrial DNA (mtDNA) in saliva also strongly correlated with HNSCC, particularly late-stage disease.

Based on this study and other work, Dr. Califano believes mtDNA has

(continued on page 5)

Cancer Research Highlights

Surgeons Recommend Breast-Conserving Surgery, But Many Women Choose Mastectomy

Many women with early breast cancer must decide whether to have mastectomy or breast-conserving surgery (BCS). In the August 20 *Journal of Clinical Oncology*, researchers reported that women who let their surgeons make the decision were more likely to get BCS than were women who decided either on their own or jointly with their surgeon.

Researchers prospectively surveyed 1,844 women in Detroit and Los Angeles identified in NCI's Surveillance, Epidemiology and End Results (SEER) database; most were diagnosed with ductal carcinoma *in situ* and were candidates for BCS. The women's mean age was 60.1 years; 70.2 percent were white, 18 percent were African American, and 11.8 percent were of other ethnic groups. Despite the medical consensus that most women were good candidates for BCS, 30 percent received mastectomy. This cannot be explained by the influence of surgeons, since only 5.3 percent of patients who let the surgeon decide had mastectomy, compared with 16.8 percent who shared the decision, and 27 percent who decided on their own.

The findings "suggest that most women perceived that they had control over the decision-making process, and [that] many of these women seemed to have preferred and received mastectomy," wrote Dr. Steven J. Katz of the University of Michigan, and colleagues. African American women, however, had a different experience. They visited surgeons more often before deciding, were more likely to wait until after their first visit to decide, and—when their surgeon made the choice for them—were more likely to undergo mastectomy.

Study Links Red Meat with Pancreatic Cancer

Researchers with the Multiethnic Cohort Study, which examines the relationship between lifestyle factors and disease outcomes among people in Hawaii and Los Angeles, have published new findings on the dietary risk factors for pancreatic cancer—specifically, red and processed meat, fat and saturated fat, dairy products, and food preparation. Their results appear in the October 5 *Journal of the National Cancer Institute*.

Some previous studies have shown a link between the disease and foods such as meat, eggs, and dairy products; the link to cancer being attributed to fat, cholesterol, and carcinogen-producing food preparation. But most of this research was conducted with small cohorts using retrospective dietary questionnaires, often completed by proxy after a participant's death. As a result, the findings from different studies were not consistent.

Multiethnic Cohort Study researchers gathered 7 years of prospective dietary data from 190,545 participants using questionnaires; they also double-checked the integrity of the data with a telephone survey of a random sample of 1,606 participants. Study results show that eating large amounts of red meat—particularly processed meat—was linked to pancreatic cancer, while no link was found between the disease and consumption of poultry, fish, dairy products, or eggs. The data also showed that there was no association with total fat or cholesterol intake. The researchers noted that preparation techniques, however, including grilling, frying, and curing may play a role in cancer risk.

Family History, Nevi Risk Factors for Multiple Melanomas

About 8.6 percent of patients diagnosed with melanoma will develop a second skin tumor, most within a year, according to a study in the October 5 *Journal of the American Medical Association*. Those with a family history of melanoma and a personal history of atypical moles called dysplastic nevi are at highest risk for multiple melanomas, wrote the researchers from Memorial Sloan-Kettering Cancer Center.

The study included 4,484 patients diagnosed with a first primary melanoma between 1996 and 2002. The researchers found that 385 patients (8.6 percent) were later diagnosed with a second primary melanoma. Although the researchers found patients with up to seven primary melanomas, the average among those with more than one tumor was 2.3. For most patients (74 percent), the initial melanoma was the thickest—and therefore the most dangerous. Fifty-nine percent presented with their second primary tumor within 1 year of their original diagnosis.

Twenty-one percent of multiple melanoma patients had a positive family history of melanoma, compared with 12 percent of patients with a single

(Highlights continued on page 5)

(Highlights continued from page 4)

primary melanoma. Thirty-eight percent of multiple melanoma patients had dysplastic nevi, compared with 18 percent of single melanoma patients.

"Patients with a positive family history or a history of [dysplastic nevi] are at significantly greater risk of developing [multiple melanomas] and should be enrolled in more intensive dermatologic surveillance programs. This high-risk subset of patients should also be further characterized genetically to further elucidate the biology and etiology of melanoma," the authors concluded.

Obesity and Weight-Gain History Predict Recurrence after Prostatectomy

Some men suffer a biochemical recurrence of prostate cancer after radical prostatectomy. Researchers at the University of Texas M.D. Anderson Cancer Center reported a greater risk of aggressive cancers in men who were obese when originally diagnosed, especially when they had gained more than 3 pounds a year since age 25. Men in the study averaged 60 years old when diagnosed.

Dr. Sara Strom and colleagues divided 526 prostatectomy patients into normal, overweight, and obese groups based on standard body mass index (BMI) categories. The men self-reported their weight and height histories over an average of 54 months. Eighteen percent of patients developed serum prostate-specific antigen levels amounting to biochemical recurrence. The overweight group did not show meaningful trends, but when obese men were compared with nonobese men (BMI more and less than 30 kg/m^2), significant differences emerged.

Men who were obese at age 25, at age 40, or who had gained more than 3.3 pounds a year all showed a risk increase of more than 130 percent. Among patients whose cancer recurred, those who had gained more than 3.3 pounds a year went 16.7 months before recurrence, compared with 23.7 months for those gaining less weight, and 39 months for those who gained little or no weight.

"These results suggest that body mass could be a better predictor of aggressiveness and more likely implicated" in the progression of prostate cancer than in its incidence, wrote the authors in the October 1 *Clinical Cancer Research*.

Gene Linked to Aggressive Ovarian Cancer

Overexpression of the gene *Rsf-1* appears to be linked to aggressive ovarian cancer, researchers from the Johns Hopkins University School of Medicine have reported. After initially identifying *Rsf-1* as being overexpressed in several cell lines, they then analyzed tumor samples from 107 ovarian cancer patients with aggressive disease. They found that the 16 patients with *Rsf-1* overexpression had statistically significant shorter survival than those without *Rsf-1* overexpression: 29 months versus 36 months.

"The mechanism of how *Rsf-1* amplification contributes to shorter survival is not known," Dr. Tian-Li Wang and colleagues wrote in the September 27 *Proceedings of the National Academy of Sciences*. "However, because the mortality of ovarian cancer patients is directly related to … recurrent disease after chemotherapy, it is conceivable that *Rsf-1* amplification may confer drug resistance and/or enhance cell proliferation in the chemoresistant recurrent tumors."

The research team used a genome-scanning technology developed at Hopkins called digital karyotyping to narrow down a region on chromosome 11 marked by significant gene amplification, and used other analyses to identify *Rsf-1* as the amplification's primary source. The research team also tested whether reducing *Rsf-1* expression using short-interfering RNAs in ovarian cancer cell lines would influence the survival of cancer cells. Cell growth was inhibited in the two of the three cell lines in which *Rsf-1* amplification and/or overexpression was seen. ◆

(Spotlight continued from page 3)

the potential to be most valuable as a surveillance tool in patients who have already been treated for HNSCC.

Research into saliva-based diagnostics definitely has a way to go, though, Dr. Califano stresses.

"Specificity is the real challenge. For screening, whether it's for modestly rare diseases or common diseases of any type, if you don't have high specificity, your false-positive rate becomes quickly, unacceptably very high," he says.

Most of the saliva studies to date, cautions Dr. Srivastava, have been pilots. The research is now at the point where, if it is to enter the clinical realm, "It needs to undergo rigorous validation studies," he says. "That means taking a broad spectrum of cases and controls and then seeing whether the markers consistently distinguish between the two."

EDRN is talking with Dr. Wong about the possibility of a national validation trial of his lab's RNA panel/assay for OSCC. ◆

By Carmen Phillips

Funding Opportunities

Following is a newly released NCI research funding opportunity:

Mentored Research Scientist Development Award
PA-06-001

Application Receipt Dates: *New applications:* Feb. 1, June 1, and Oct. 1, 2006; Feb. 1, June 1, and Oct. 1, 2007; Feb. 1, June 1, and Oct. 1, 2008.

Competing continuation, revised, supplemental applications: Nov. 1, 2005; March 1, July 1, and Nov. 1, 2006; March 1, July 1, and Nov. 1, 2007; March 1, July 1, and Nov. 1, 2008.

AIDS and AIDS-Related Applications (New, competing continuation, revised, and supplemental): Jan. 2, May 1, and Sept. 1, 2006; Jan. 2, May 1, and Sept. 1, 2007; Jan. 2, May 1, and Sept. 1, 2008.

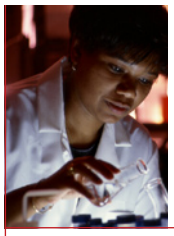
This is a renewal of PA-00-019. This funding opportunity will use the K01 award mechanism. For more information see http://cri.nci.nih.gov/4abst.cfm?initiativeparfa_id=3135.

Inquiries: David J. Eckstein, Ph.D.—eckstein@mail.nih.gov; Belinda M. Locke—lockeb@mail.nih.gov

For comprehensive information about NCI funding priorities and opportunities, go to http://www.cancer.gov/researchandfunding. ◆

Featured Meetings and Events

A calendar of scientific meetings and events sponsored by the National Institutes of Health is available at http://calendar.nih.gov/cgi-bin/calendar. ◆

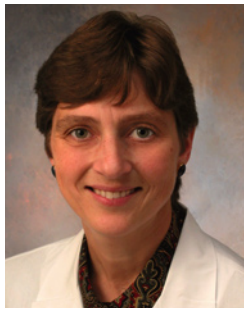


Featured Clinical Trial

Adjuvant Breast Cancer Therapy for Premenopausal Women

Name of the Trial
Phase III Randomized Study of Ovarian Function Suppression in Combination with Tamoxifen versus Ovarian Function Suppression in Combination with Exemestane versus Tamoxifen Alone in Premenopausal Women with Endocrine-Responsive Breast Cancer (IBCSG-24-02). See the protocol summary at http://cancer.gov/clinicaltrials/IBCSG-24-02.

Study Chairs
Dr. Gini Fleming, North American Breast Intergroup; Dr. Prudence Francis, Breast International Group



Dr. Gini Fleming

Why Is This Trial Important?
Many women with breast cancer have tumors that grow in response to the female hormone estrogen (endocrine-responsive tumors). The drug tamoxifen has been used to treat endocrine-responsive breast cancer in both premenopausal and postmenopausal women.

Recently, a new class of drugs called aromatase inhibitors was shown to improve disease-free survival in postmenopausal women with endocrine-responsive cancers. However, aromatase inhibitors are not effective in premenopausal women because their ovaries are still producing estrogen.

In this trial, researchers will study three groups of premenopausal women with endocrine-responsive breast cancer. Menopause will be induced in two of the groups; one group will be treated with tamoxifen, the other with the aromatase inhibitor exemestane. Menopause will not be induced in the third group, which will be treated with tamoxifen. The researchers hope to determine which treatment approach is most effective in preventing breast cancer recurrence in premenopausal women.

"Young women with endocrine-responsive breast cancer have a high risk for recurrence if not treated with antihormone therapy," said Dr. Fleming. "We are trying to explore ways to improve that therapy for these patients."

Who Can Join This Trial?
Researchers seek to enroll 3,000 premenopausal women diagnosed with breast cancer who have had their tumors surgically removed. See the list of eligibility criteria at http://www.cancer.gov/clinicaltrials/IBCSG-24-02.

Where Is This Trial Taking Place?
Study sites in the United States are recruiting patients for this trial. See the list of sites at http://www.cancer.gov/clinicaltrials/IBCSG-24-02.

Contact Information
See the list of study contacts at http://www.cancer.gov/clinicaltrials/IBCSG-24-02 or call NCI's Cancer Information Service at 1-800-4-CANCER (1-800-422-6237). The toll-free call is confidential. ◆

An archive of "Featured Clinical Trial" columns is available at http://cancer.gov/clinicaltrials/ft-all-featured-trials.

Notes

Science Writers' Seminar Illuminates Behavioral Aspects of Cancer

The NCI Science Writers' Seminar on October 5 at Fox Chase Comprehensive Cancer Center in Philadelphia attracted about 40 attendees, including journalists from the Wilmington *News Journal,* National Public Radio, and *People* and *Philadelphia* magazines. Dr. Michael Stefanek of NCI and Drs. Mary Daly, Suzanne Miller, and Neal Meropol of Fox Chase discussed the different ways in which physicians and patients react to, communicate, and make decisions about a diagnosis of cancer. Dr. Miller's presentation, about the extent to which people ignore or amplify information about cancer threats, drew a number of questions from the audience. The archived webcast is available for viewing at http://videocast.nih.gov/PastEvents.asp?c=998.

Roberts and Sporn Share 2005 Komen Foundation Award

The 2005 Susan G. Komen Foundation Brinker Award for Distinguished Science in the area of basic research has been awarded to Drs. Anita Roberts and Michael Sporn for their joint research on the cytokine transforming growth factor-beta (TGF-β). Between 1976 and 1995, Drs. Roberts and Sporn worked together, discovered, and characterized TGF-β, and later established roles for this peptide in autoimmune disease, fibrogenesis, carcinogenesis, and wound healing. Their research is now providing the foundation for new therapeutic strategies.

Dr. Roberts joined NCI in 1976 and served as chief of the Laboratory of Cell Regulation and Carcinogenesis in CCR from 1995 to 2004. Dr. Sporn was with NCI for more than 30 years, and now is the Oscar M. Cohn Professor of Pharmacology and Toxicology and of Medicine at Dartmouth Medical School.

caBIG Draws Industry Interest at Partners Meeting

More than 200 representatives from biomedical and informatics companies attended the first industry partners meeting of NCI's cancer Biomedical Informatics Grid (caBIG). The September 30 meeting was convened to discuss and encourage involvement by the commercial and industrial sectors in the caBIG program. Dr. Ken Buetow, director of NCI's Center for Bioinformatics, told industry representatives, "We need and want you to be part of caBIG. We realize that this can't be just an academic-centered enterprise."

Other speakers provided an overview of current and proposed caBIG tools and discussed how commercial software companies can make their products compatible with caBIG standards. Dr. Robert Beck, chief information officer at Fox Chase, noted that his and other NCI-designated Cancer Centers are already big customers of private-sector vendors. "The capability for 'plug and play' with caBIG architecture is a requirement for us to adopt new tools and programs offered by industry," he said. "If vendors aren't responsive, that will really restrict their ability to do business with us going forward."

Leischow Returns to Arizona Cancer Center

After 5 years with NCI, Dr. Scott Leischow has resigned effective October 31. He has accepted the position of a deputy director of the Arizona Cancer Center.

While at NCI, Dr. Leischow served as chief of the Tobacco Control Research Branch and later as acting associate director of the Behavioral Research Branch in the Division of Cancer Control and Population Sciences. Since 2004, Dr. Leischow has been on detail to the Office of the Secretary, Department of Health and Human Services, serving as senior advisor for tobacco policy.

Before coming to NCI, Dr. Leischow was codirector of the Arizona Cancer Center's Biobehavioral Oncology Research Program. He received his undergraduate degree in psychology from the University of Wisconsin-Parkside, earned his M.A. and Ph.D. in health education from the University of Maryland, and completed a postdoctoral fellowship in behavioral pharmacology at Johns Hopkins University.

SEER Web Site Redesigned

The NCI Surveillance, Epidemiology, and End Results (SEER) program's Web site (http://seer.cancer.gov) has been redesigned. The site is now more user-friendly, with improved search engine results based on feedback from surveys and e-mails. The new design allows users to more easily navigate the site using tabs across the top of every page. SEER's products and resources have been categorized into key areas for easier access.

The home page provides quick access to key cancer statistics through the printer-friendly Cancer Stat Facts, Fast Stats, the latest reports and monographs, and current releases of software and data. In addition, the SEER home page and the pages of key areas include a link for "Resources Beyond SEER" to help users find additional information. ◆

Guest Commentary by Michael Leavitt

NCI Milestones Help Fulfill 500-Day Plan

Next month, I will reach 300 days on the job as Secretary of Health and Human Services—three-fifths of my first 500 days in office. I've greatly valued the opportunity to serve the American people, and I'm looking forward to meeting with the employees and leaders in the HHS family of agencies, including the talented and committed people at NCI.

NCI staff have provided important input to my 500-Day Plan. The Plan was developed to help the entire Department focus on actions we can take to benefit the American people within the first 500 days of a 5,000-day horizon. It is based on the concept of anticipating our next steps, instead of simply reacting.

This is a concept that NCI staff practice every day. The strategic initiatives already taken by the Institute will enhance several key objectives in my 500-Day Plan. Let me highlight a few of those programs.

Transforming the Health Care System

NCI's cancer Biomedical Informatics Grid (caBIG) addresses the goal of fostering collaboration to advance biomedical research and patient care. It will bring researchers together via an Internet-based system through which they can gather and share data. This will increase the strength and scope of research done in caBIG-participating centers. It will also allow the deduction of broader and more meaningful conclusions that will rapidly create improved patient outcomes. caBIG's partnerships with almost 100 organizations around the country have the potential to be useful beyond the cancer research community.

NCI also supports community-based approaches to closing the health care gap faced by many disadvantaged and minority populations. A good example is NCI's Patient Navigator Program, in which community advocates help cancer patients get health care services.

Advancing Medical Research

NCI and its grantees continue to lead in research advances. A key example is NCI's commitment to the goal of improving the clinical research network to advance prevention, diagnosis, and treatment. Implementation of the recommendations from NCI's Clinical Trials Working Group will ensure that drugs and other interventions are promptly evaluated, reducing the time for proven interventions to reach patients.

I also applaud NCI's Alliance for Nanotechnology in Cancer. This is a comprehensive, systematized initiative encompassing the government and the free market, designed to accelerate the application of the best capabilities of nanotechnology to cancer.

Improving the Human Condition Around the World

NCI continues its exemplary role in health diplomacy that is so vital to promoting democracy and freedom around the world.

The Institute's mentorship of the Middle East Cancer Consortium (MECC) is an excellent example of scientific outreach. As part of its involvement, NCI is providing extensive training to MECC members including Cyprus, Egypt, Israel, Jordan, the Palestinian Authority, and Turkey.

NCI's studies in Costa Rica on a vaccine to prevent infection with human papillomavirus—which causes about 70 percent of all cervical cancers worldwide—holds the promise of eradicating this deadly cancer in many developing countries.

With the help of NCI and other HHS agencies, I believe the 500-Day Plan will make a difference in the lives and health of many people. I invite you to learn more by visiting http://www.hhs.gov/500DayPlan. ◆

Michael Leavitt
Secretary
U.S. Department of Health and Human Services

The *NCI Cancer Bulletin* is produced by the National Cancer Institute (NCI). NCI, which was established in 1937, leads the national effort to eliminate the suffering and death due to cancer. Through basic, clinical, and population-based biomedical research and training, NCI conducts and supports research that will lead to a future in which we can identify the environmental and genetic causes of cancer, prevent cancer before it starts, identify cancers that do develop at the earliest stage, eliminate cancers through innovative treatment interventions, and biologically control those cancers that we cannot eliminate so they become manageable, chronic diseases.

For more information on cancer, call 1-800-4-CANCER or visit http://www.cancer.gov.

NCI Cancer Bulletin staff can be reached at ncicancerbulletin@mail.nih.gov.